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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/473,765	12/29/1999	MARKO PARIKKA	297-009122-U	1440

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EXAMINER

SEMBER, THOMAS M

ART UNIT PAPER NUMBER

2875

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/473,765

Applicant(s)

PARIKKA ET AL.

Examiner

Thomas M Sember

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 09/10/03.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. In view of the appeal brief filed on 02/09/2004, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 09/10/03 was filed after the mailing date of the final rejection filed on 09/05/2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

3. Claims 17-18, 21-22, 24, 26 and 28 are objected to because of the following informalities: In claims 17, 24, 26 and 28 line 10, "at least one light source" is indefinite because "a light source" is already claimed in line 2 and it is unclear if applicant intends on claiming two separate light sources. Appropriate correction is required.
4. In claims 17, 24, 26 and 28 line 9, "a flat-panel display" is indefinite because "a display" is already claimed in line 3 and it is unclear if applicant intends on claiming two separate displays. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
7. Regarding claims (claim 1, line 5, claim 17, lines 10-11, claim 23, line 5, claim 24, line 10, claim 25, line 5, claim 26, lines 9-10, claim 27, line 5, claim 28, lines 9-10), the applicant claims "means of at least one light source" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) "means," it is impossible to

determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

8. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1.) In claim 1, the applicant claims "a surface including patterns having diffractive properties.....said patterns comprising uniform, mutually different areas distributed on said first surface" **and then separately claims** "the light pipe further comprising first pixel formations having a first orientation and second pixel-like formations having a second orientation", it is unclear from the claim language how the patterns relate to the pixel formations and it appears that the diffractive patterns are separate from the pixel formations. The examiner is aware from applicant's specification and the drawings (particularly figure 9A) that the patterns and pixel formations with first and second orientations are essentially the same thing but based on claims 1 and 17 it is not all clear and renders the claim vague and indefinite.

Furthermore, since the patterns are the same as the formations claim 2, lines 9-11 are redundant to lines 4-8.

2.) In claim 2, line 3 "the environment" is vague and indefinite because it is not clear what the environment represents. For example, is it the environment of other patterns or the environment of other formations?????

3.) Claim 15 is indefinite because it is unclear **what** the angle differs substantially from in a 90 degree angle.

As best understood the following rejection applies: It is also presumed that in claims 17, 24, 26 and 28 that the applicant positively claims the backlighting display.

Claim Rejections - 35 U.S.C. § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

I. Claims 1-9, 19-20, 23, 25 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiono et al. Shiono et al discloses a light pipe 12 comprising: a first surface, said surface including two dimensional patterns 2 having diffractive properties for coupling light out from the light pipe to provide backlighting of a flat panel display by means of at least one light source, said patterns comprising uniform, mutually different areas distributed on said first surface. **The limitation of "for coupling light out from the light pipe to provide backlighting of a flat-**

panel display is merely intended use and not given any patentable weight. Regarding claim 28, as broadly claimed the light of Shiono et al is close to the light guide.

Claim Rejections - 35 U.S.C. § 102

II. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

III. Claims 1-10, 16, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 61-35585 (figure 2). JP 61-35585 (figure 2) discloses a light pipe 1 comprising: a first surface, said surface including two dimensional patterns 7 having diffractive properties for coupling light out from the light pipe to provide backlighting of a flat panel display by means of at least one light source, said patterns comprising uniform, mutually different areas distributed on said first surface. Regarding claim 28, as broadly claimed the light of Shiono et al is close to the light guide. The light emitted from the display is uniform with a distance from the light pipe. **The limitation of "for coupling light out from the light pipe to provide backlighting of a flat-panel display is merely intended use and not given any patentable weight.**

Response to Arguments

9. Applicant's arguments filed on 02/09/2004 have been fully considered but they are not persuasive.

The applicant's arguments in view of Shinio et al and JP 61-35585 are not found persuasive because even though Shinio and JP 61-35585 do not specifically teach a backlighting device, the backlighting device is not positively recited. The limitation of "for coupling light out from the light pipe to provide backlighting of a flat-panel display.....for producing uniform lighting" is merely intended use and given very little patentable weight any patentable weight.

Applicant is reminded that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Since the prior art structure of Shinio et al and JP 61-35585 are still capable of performing the intended use, both references meet claims 1.

Finally applicant argues "claims 11 and 13-14 provide uniform brightness (see p. 5, lines 30-33; p. 11, lines 1-6). Thus, contrary to the Examiner's assertion at the bottom of p. 3 of the final rejection, they provide an advantage and unexpected

result. Hence the rejection of these claims under 35 USC 103 on Shiono or JP 61-35585 should be reversed since these values are not a mere matter of design choice.”

The examiner agrees that the preferred ranges of applicant's invention provides the advantage of a desired output efficiency

Allowable Subject Matter

10. Claims 10-16, 19-20 and 29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. Claims 17-18, 26 and 28 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

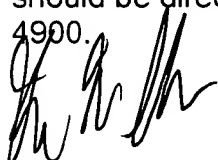
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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M. Sember whose telephone number is (703) 308-1938. The examiner can normally be reached on Monday - Thursday from 8:00 AM - 5:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea, can be reached at (703) 305-4939. The fax phone number for this group is (703) 308-7724.

Any inquiries of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-4900.



Thomas M. Sember

Primary Examiner
7/11/04